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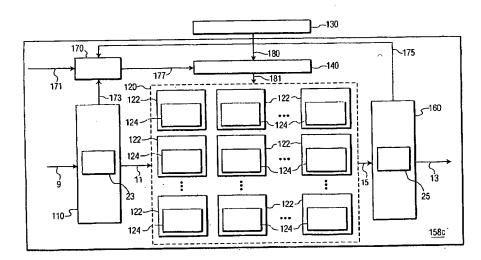
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- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS, N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (71) Applicant (for AE only): U.S. PHILIPS CORPORA-TION [US/US]; 1251 Avenue of the Americas, New York, NY 10020 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): VAIDYANATHAN, Krishnamurthy [NL/NL]; Groenewoudseweg 1, NL-5621

BA Eindhoven (NL). WITTIG, Karl, R. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). BURNS, Geoffrey, F. [NL/NL]; Groenewoudseweg 1; NL-5621 BA Eindhoven (NL).

- (74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS, N.V., c/o HALAJIAN, Dicran, P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US).
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(54) Title: A DYNAMICALLY RECONFIGURABLE SIGNAL PROCESSING APPARATUS AND METHOD FOR USE IN A HIGH SPEED DIGITAL COMMUNICATION SYSTEM



(57) Abstract: A dynamically reconfigurable signal processing apparatus (158c) is disclosed. The signal processing apparatus (158c) includes at least one system controller (170) for detecting a change of state in a high speed digital communication system (10). Responsive to the change of state, in one embodiment, signal processing function code is downloaded, in real-time or in near real-time, from an external memory (130) to be processed in an array-type processor (120). In another embodiment, signal processing function code for a plurality of signal processing functions are pre-stored in the arraytype processor (120) and are switch selectable in response to a change of system state thereby obviating the need to download signal processing function code.



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